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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,275	02/19/2004	Gary Tripp	D0932-00385	4232
8933	7590	11/10/2005	EXAMINER	
DUANE MORRIS, LLP IP DEPARTMENT 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103-4196			GOFMAN, ANNA	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/782,275	<b>Applicant(s)</b> TRIPP ET AL.	
	<b>Examiner</b> Anna Gofman	<b>Art Unit</b> 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 01 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 49-55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 02/04; 09/04; 10/04; 01/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Election/Restrictions***

1. Claims 49-55 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on November 1, 2005.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 22-48 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an "inorganic insulation product having an R-value, comprising a final mat having a first side and a second side, the mat comprising: loose fiber insulation-type glass fibers; plastic-containing bonding fibers, said glass fibers and the plastic-containing bonding fibers being uniformly blended together to form a blended layer having a substantially uniform density throughout its volume, wherein the plastic-containing bonding fibers bond at least a portion of the glass fibers together; and a facing layer bonded to at least one of the two sides of the mat", does not reasonably provide enablement for a specific definition of an R-value. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to enable the invention commensurate in scope with these claims.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 22-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear as to what units comprise said R-value. Since claim 48 depends directly on claim 22, it is also indefinite.

***Claim Rejections - 35 USC § 102***

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-4, 6-15, 18, 22-27, 32-41, and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Kajander et al. (US 2003/ 0008586).

Kajander et al. disclose an insulation material comprising a nonwoven web of glass fibers and plastic-containing bi-component fibers (pg.1 col.2 paragraph 0008). The bi-component fibers consist of a polyester core covered with a sheath of polyethylene (pg.1 col.2 paragraph 0010), which is inherently a thermoplastic polymer. Further, the sheath material inherently has a lower melting point temperature than that of the core material. On page 3 col. 2 paragraph 0030, Kajander et al. disclose that said mat has a density of 45 pounds per cubic foot, implying a uniform density throughout the laminate. The inorganic or glass fibers have a fiber length of no more than 3 inches (or 76.2 mm) (pg.2 col.2 paragraph 0019) and make up at least 80 weight percent of the fibrous material. The plastic-containing fibers make up about 20 weight percent (pg.3 col.1 paragraph 0027), which is essentially free of formaldehyde (pg.1 col.1 paragraph 008). An intermediate layer of the laminate which is used as a flame-retardant may comprise

a sheath of polyethylene or kraft fibers (pg.2 col.1 paragraph 0017; pg.1 col. 2 paragraph 0010 and Example 1, respectively). Thus, claims 1-4, 6-15, 18, 22-27, 32-41, and 44 are rejected.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5, 16-17, 19-21, 30-31, 42-43, and 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajander et al.

The features of Kajander et al. have been set forth above. Kajander et al. teach said glass fibers having a diameter of about 6 microns (pg.2 col.2 paragraphs 0018), of the laminate, which has a weight of 1.7 pounds per 100 square feet (or 83 grams per square meters) (Example 3) . Although Kajander et al. is silent about the diameter of said plastic-containing fibers, the density of the fiber insulation, and the thickness of the insulation material, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select the desired density, fiber diameters and lengths through the process of routine experimentation in order to arrive at values which offered the optimum insulation in the invention of Kajander et al. Thus, claims 5, 16-17, 19-21, 30-31, 42-43, and 45-47 are rejected.

9. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajander et al. in view of Jaffee (US 2004/ 0266304).

The features of Kajander et al. have been set forth above. Kajander et al. teach a formaldehyde-free nonwoven fibrous mat but fail to disclose bi-component fibers comprising a core of mineral fibers, and a water resistant additive of epoxy foam, acrylic or asphalt. Jaffee is drawn to non-woven glass fiber mat laminates. Jaffee teaches non-woven mat comprising a binder of glass or mineral fibers (pg.4 col.1 paragraph 0032), bound together with a water resistant binder of acrylic (pg.4 col.1 paragraph 0033). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include mineral fibers in the binder taught by Kajander et al. The motivation would have been to provide strength and insulation to the core (pg.1 col.1 paragraph 0006). Further, it would have been obvious to one having ordinary skill in the art to use acrylic as the water repelling materials taught by Kajander et al. The motivation would have been to provide further insulation as well as excellent water repellency (pg.4 col.1 paragraph 0034). Thus, claims 13, 28, and 40 are rejected.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In addition to the references provided by Applicant, the follow documents are considered pertinent to Applicant's invention:

Fay et al. (US 2004/0185226) teach a formaldehyde-free fiberglass insulation assembly using mineral fibers, but do not teach an ability to resist water permeability.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anna Gofman whose telephone number is (571) 272-7419. The examiner can normally be reached on Mon.-Fri. 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Anna Gofman  
Examiner  
Art Unit 1771

Examiner  
Art Unit 1771  
*Elizabeth M. O'Connell*  
ELIZABETH M. O'CONNELL  
PRIMARY EXAMINER